

March 6, 2002

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Figure 1. The structure of the proposed model. The input layer consists of 10 nodes representing the input features. The hidden layer consists of 10 nodes representing the hidden features. The output layer consists of 1 node representing the output. The model is trained using a combination of supervised and unsupervised learning. The supervised learning is used to train the model on the labeled data, and the unsupervised learning is used to train the model on the unlabeled data. The model is evaluated using the accuracy, precision, recall, and F1 score.

A  
Box Set

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The PTO did not receive the following listed item(s) 22 AW, NC (109 and 110)

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Page 4

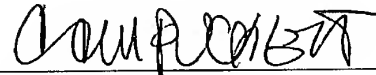
20. ☒ Amend Specification on Page 1, after the Title to include:

RELATED APPLICATIONS

This Application is a Continuation of PCT Application PCT/GB00/03437 filed on September 7, 2000.

- ☒ The Commissioner is hereby authorized to charge any variance between the amount due and the Patent Office charges to **Deposit Account No. 50-1640**.

Respectfully submitted,

By:   
Craig L. Puckett  
Registration No. 43,023

For: Laurence H. Posorske  
Registration No. 34,698

CLP:cdh  
Enclosure

- b. ☐ Copy from a prior application  
(for continuation/divisional with Box 17 completed)
- i. ☐ DELETION OF INVENTOR(s):  
Signed statement attached deleting inventor(s) named in prior application.
4. ☐ Incorporation By Reference (useable if Box 4b is marked)  
The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b, is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.
5. ☐ Microfiche Computer Program (Appendix)
6. ☒ Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
- a. ☒ Computer Readable Copy
- b. ☒ Paper Copy (identical to computer copy)
- c. ☒ Statement verifying identity of above copies
7. ☐ Assignment and Assignment Recordation Form
8. ☐ 37 C.F.R. 3.73(b) Statement ☐ Power of Attorney
9. ☐ English Translation Document (if applicable)
10. ☒ Information Disclosure Statement with PTO-1449 and References
- ☐ International Search Report
- ☒ Copies of Information Disclosure Statement Citations
11. ☐ Preliminary Amendment
12. ☒ Return Receipt Postcard
13. ☒ Small Entity Status Claimed: ☐ Independent Inventor  
☒ Small Business Concern  
☐ Non-Profit Organization
- ☐ Statement Enclosed
- ☐ Statement Filed in Prior Application; Status Still Proper and Desired

14. ☐ Foreign Priority is Claimed as Follows:  
\_\_\_\_\_
- ☐ If Foreign Priority is Claimed, Certified Copy of the Above Priority Document(s) is Submitted Herewith
15. ☐ Other: \_\_\_\_\_
16. ☒ Continuation ☐ Divisional ☐ Continuation-in-Part of  
Prior Application No.: PCT/GB00/03437 filed September 7, 2000
- ☐ Complete Application Based on Provisional Application No.: \_\_\_\_\_  
filed \_\_\_\_\_
17. ☒ A new power of attorney or authorization of agent (PTO/SB/81) is as follows:
- ☒ The power of attorney is to: Rodger L. Tate, Reg. No. 27,399; Anthony W. Shaw, Reg. No. 30,104; Cono A. Carrano, Reg. No. 39,623; Laurence H. Posorske, Reg. No. 34,698; Robert A. King, Reg. No. 42,738, Craig L. Puckett, Reg. No. 43,023, and Trevor Q. Coddington, Reg. No. 46,633.
18. Please address all correspondence to:
- ☒ **CUSTOMER NUMBER** 26118
- ☐ Laurence H. Posorske  
Intellectual Property Department  
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19. ☒ Please charge the fee of \$591.00 to **Deposit Account No. 50-1640.**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: LE PAGE *et al.*

Application No.: To Be Assigned

Group Art Unit: To Be Assigned

Filed: March 6, 2002

Examiner: To Be Assigned

For: NUCLEIC ACIDS AND PROTEINS FROM GROUP B STREPTOCOCCUS

## SUBMISSION OF SEQUENCE LISTING

Commissioner for Patents  
Washington, D.C. 20231

Sir:

Applicants submit herewith a paper copy of a properly formatted Sequence Listing and a computer readable copy (CDrom) of the sequence listing in accordance with the requirements of 37 C.F.R. § 1.821-1.825.

Applicants hereby state that the content of the paper and computer readable copies of the Sequence Listing, submitted in accordance with 37 C.F.R. § 1.821(c) and (e), respectively, are the same, and that this submission does not include any new matter.

No fee is believed necessary with this submission. However, should the U.S. Patent and Trademark Office determine that additional fees are due upon the filing of this document, please charge any such fees to the undersigned's Deposit Account No. 50-1640.

Respectfully submitted,

**BROBECK, PHLEGER & HARRISON LLP**

March 6, 2002

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